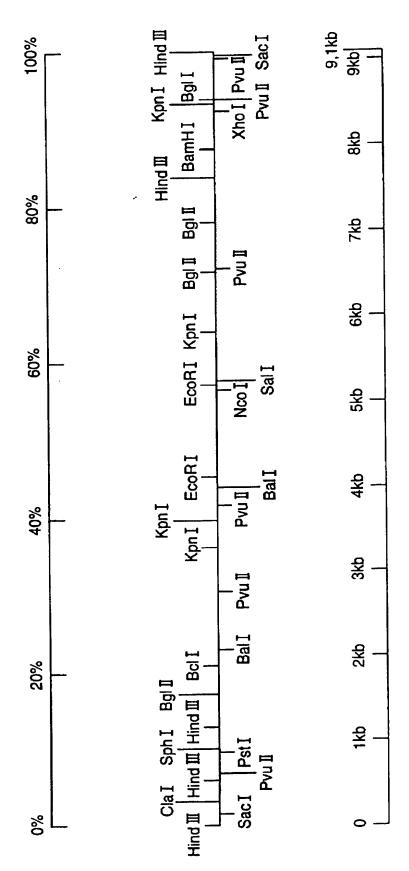
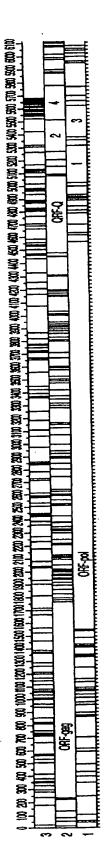


Replacement Sheet



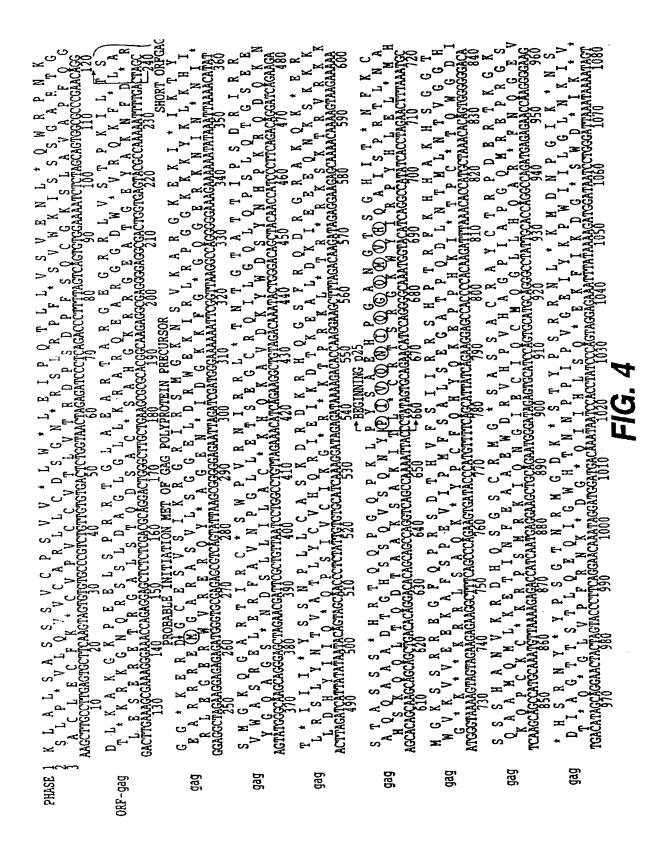




25

FIG. 3







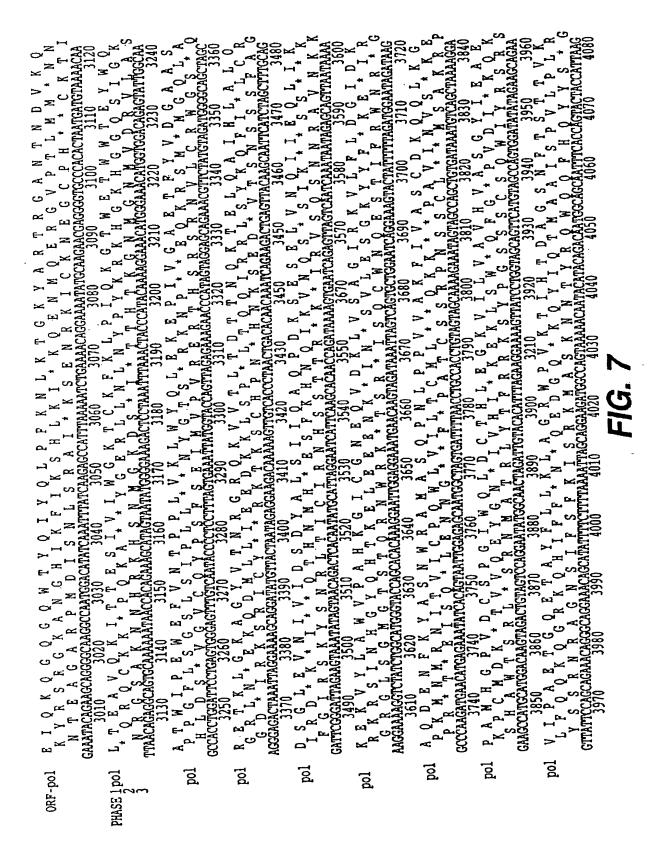
pol gag ፳ pol gag gag



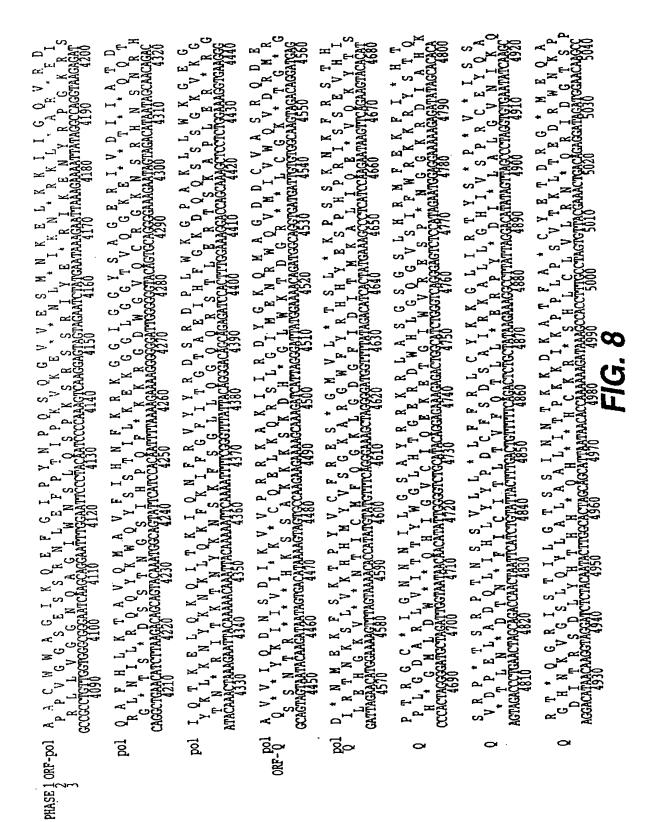
log o ጀ pol pol <u>p</u> pol bol bol

FIG. 6

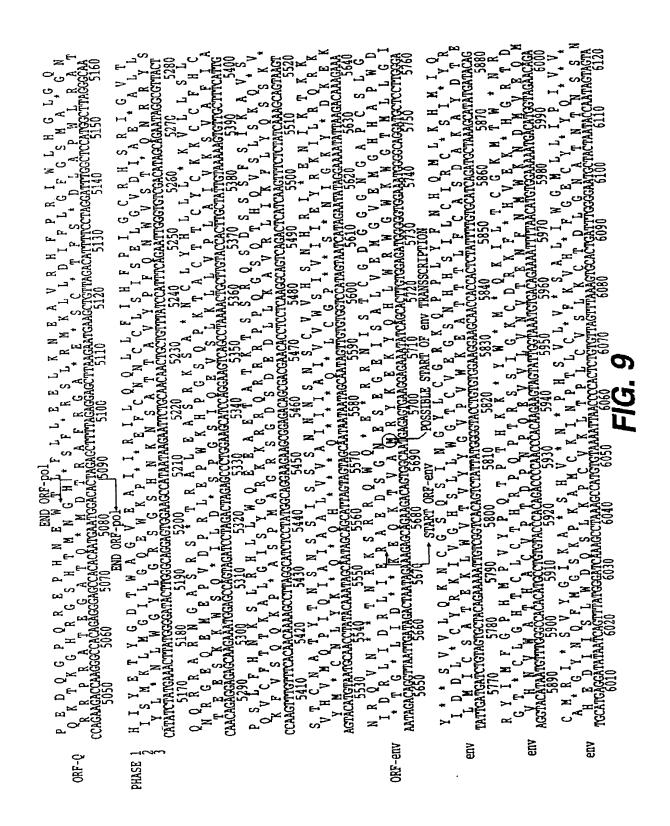




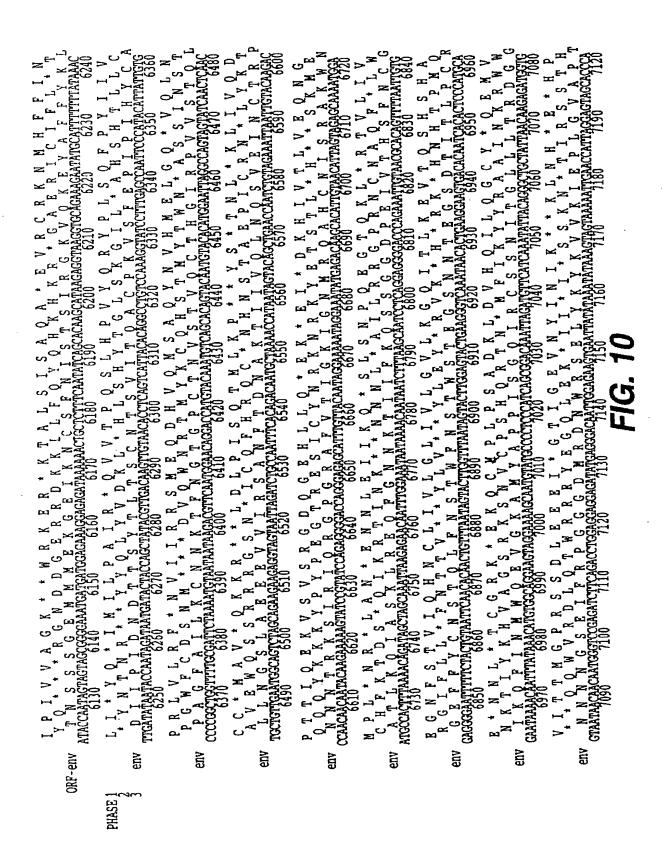














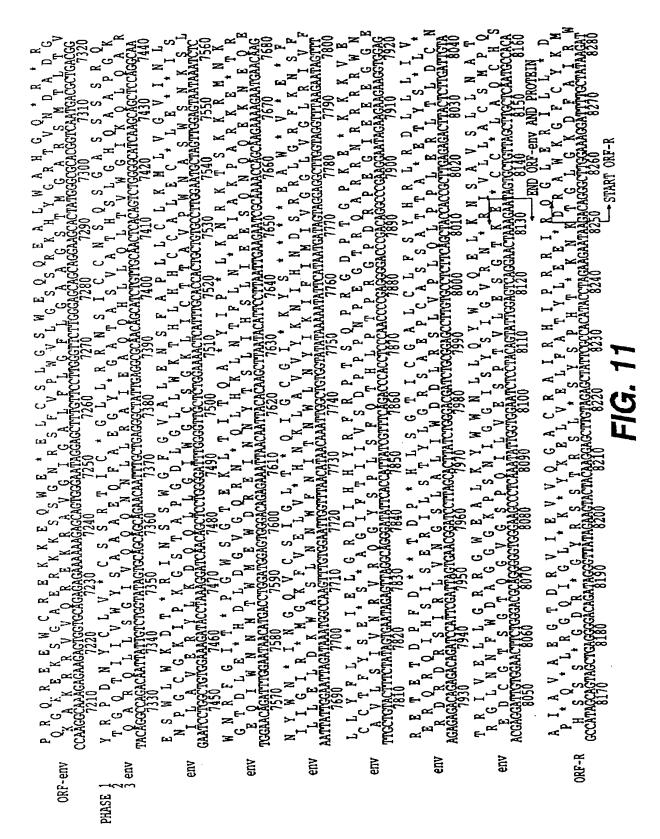




FIG. 12



N R G E Q E M E P V D P R L E P W K H P G S Q P K
T F E S K K W S Q * I L D * S P G S I Q E V S L
CAACAGAGGAGACAAGAAATGGAGCCAGTAGATCCTAGACTAGAGCCCTGGAAGCATCCAGGAAGTCAGCCTAA
5290 5300 5310 5320 5330 5340 5350

PSLFHNKSLRHLLWQEEAETATKTS
QVCFTTKALGISYGRKKRRQRRRPP
KFVSQQKP*ASPMAGRSGDSDEDLL
CCAAGTTTGTTTCACAACAAAAGCCTTAGGCATCTCCTATGGCAGAAAGCGGAGACAGCGACGAAGACCTCCT
5410 5420 5430 5440 5450 5460 5476

S T C N A T Y T N S N S S I S S S N N N S N S C V V H V M Q P I Q I A I A A L V V A I I I A I V V W Y M * C N L Y K * Q * Q H * * * Q * * * * Q * L C C AGTACATGTAATGCAACCTATACAAATAGCAATAGCAGCATTAGTAGCAATAATAATAATAGCAATAGTTGTGTGG 5530 5540 5550 5560 5570 5580 5590

N R Q V N * * T N R K S R R Q W Q * E * R R N I S I D R L I E R A E D S G N E S E G E I S A * T G * L I D * * K E Q K T V A M R V K E K Y Q H AATAGACAGGTTAATTGATAGACAAGAGCAGAAGACAGTGGCAATGAGAGTGAAGGAAAATATCAGCA 5650 5660 5670 5680 5690 5700 5710

R Y I M F G P H M P V Y P Q T P T H K K * Y W * M G T * C L G H T C L C T H R P Q P T R S S I G K C V H N V W A T H A C V P T D P N P Q E V V L V N V AGGTACATAATGTTTGGGCCACACATGCCTGTGTACCCACAGACCCCACACAGAAGTAGTATTGGTAAATGT 5890 5900 5910 5920 5930 5940 5950

C M R I * S V Y G I K A * S H V * N * P H S V L V A * G Y N Q F M G S K P K A M C K I N P T L C * F H E D I I S L W D Q S L K P C V K L T P L C V S L TGCATGAGGATATAATCAGTTTATGGGATCAAAGCCTAAAGCCATGTCTAAAATTAACCCCACTCTGTGTTAGTTT 6010 6020 6030 6040 6050 6060 6070

I P I V V A G K * * W R K E R * K T A L S I S A Q Y O * * * R G N D D G E R R D K K L L F Q Y Q H K T N S S S G E M M M E K G E I K N C S F N I S T S ATACCAATAGTAGCAGGGGAAATGATGATGATGAGAAAGGAGATAAAAAACTGCTCTTTCAATATCAGCACAAG 6130 6140 6150 6160 6170 6180 6190

L I * Y Q * I M I L P A I R * Q V V T P Q S L H R * Y N T N R * * Y Y Q L Y V D K L * H L S H Y T G D I I P I D N D T T S Y T L T S C N T S V I T Q A TTGATATAATACCAATAGATAATGATACTACCAGCTATACGTTCACAAGTTGTAACACCTCAGTCATTACACAGGG 6250 6260 6270 6280 6290 6300 6310

PRLVLRP*NVIIRRSMEQDHVQMSA



P G S Q P K T A C I T C Y C K K C C F H C Q E V S L K L L V P L A I V K S V A F I A CAGGAAGTCAGCCTAAAACTGCTTGTACCACTTGCTATTGTAAAAAAGTGTTGCTTTCATTG 5390 5380 5370 5360 A T K T S S R Q S D S S S F S I K A V S Q R R R P P Q G S Q T H Q V S L S K Q * V S D E D L L K A V R L I K F L Y Q S S K * AGCGACGAAGACCTCCTCAAGGCAGTCAGACTCATCAAGTTTCTCTATCAAAGCAGTAAGT 5510 5500 5480 5490 5470 S N S C V V H S N H R I * E N I K T K K
A I V V W S I V I I E Y R K I L R Q R K
* Q * L C G P * * S * N I G K Y * D K E K TAGCĂATAGTŢGTĞTGĞŢĊĊĄTAGTAAŢĊĄŢAGAÄTAŢĄĢĞAAÂATĀŢŢĄĄGĀCAÂAĢĀĄĄ 5600 R R N I S T C G D G G G N G A P C S L G G E I S A L V E M G V E M G H H A P W D K E K Y Q H L W R W G W K W G T M L L G AAGGAGAAATATCÄGCACTTGTGGAGATGGGGGTGGAAATGGGGCACCATGCTCCTTGGGA 5750 5760 5740 5730 5710 5720 C G P K Q P P L Y F V H Q M L K H M I Q V E G S N H H S I L C I R C * S I * Y R V W K E A T T T L F C A S D A K A Y D T TGTGGAAGGAACCACCACTCTATTTTGTGCATCAGATGCTAAAGCATATGATACAG 5830 5840 5850 5860 5870 5880 * Y W * M * Q K I L T C G K M T W * N R S I G K C D R K F * H V E K * H G R T D V V L V N V T E N F N M W K N D M V E Q M TAGTATTGGTAAATGTGACAGAAAATTTTAACATGTGGAAAAATGACATGGTAGAACAGA 5950 5960 5970 5980 5990 6000 H S V L V * S A L I W G M L L I P I V V
T L C * F K V H * F G E C Y * Y Q * * *
P L C V S L K C T D L G N A T N T N S S N CACTCTGTGTTAGTTTAAAGTGCACTGATTTGGGGGAATGCTACTAATACCAATAGTAGTA 6110 6100 6080 6090 S I S A Q A * E V R C R K N M H F F I N O Y O H K H K R * G A E R I C I F L * T N I S T S I R G K V Q K E Y A F F Y K L TCAĀTĀŢĊĀĠĊĀĊĀĀĢĢĀŢĀĀĠĀGĢTĀĀĠĢŤĠĊĂĠĀĀĢĀĀTĀTĠĊĀŢŢŢŢŢŢŢŦĀŢĄĀĀC 6220 6200 6210 Q S L H R P V Q R Y P L S Q F P Y I I V S H Y T G L S K G I L * A N S H T L L C V I T Q A C P K V S F E P I P I H Y C A CAGTCATTACACÂGGCCTGTCCAAAGGTATCCTTTGAGCCAATTCCCATACATTATTGTG 6330 6340 6350 6360 V Q M S A Q Y N V H M E L G Q * Y Q L N



PCWFCDSKM***DVQWNRTMYKCO
PAGFAILRCNNKTFNGTGATGAACAGGACCATGTACAAATGTCAGC
CCCCGGCTGGTTTTGCGATTCTAAAATGTAATAATAATAAGACGTTCAATGGAACAGGACCATGTACAAATGTCAGC
6370 6380 6390 6400 6410 6420 6430

C C * M A V * Q K K R * * L D L P I S Q T M L K P A V E W Q S S R R R G S N * I C Q F H R Q C * N H L L N G S L A E E E V V I R S A N F T D N A K T TGCTGTTGAATGGCAGTCTAGCAGAAGAGAGAGAGAGTAATTAGATCTGCCAATTTCACAGACAATGCTAAAACCA 6490 6500 6510 6520 6530 6540 6550

PTTIQEKVSVSRGDQGEHLLQ*EK*
QQQYKKKYPYPEGTRESICYNRKNR
NNNTTRKSIRIQRGPGRAFVTIGKI
CCAACAACAATACAAGAAAAGTATCCGTATCCAGAGGGGACCAGGGAGAGCATTGTTACAATAGGAAAAATAG
6610 6620 6630 6640 6650 6660 6670

M P L * N R * L A N * E N N L E I I K Q * S L S N C H F K T D S * Q I K R T I W K * * N N N L * A I A T L K Q I A S K L R E Q F G N N K I I I F K Q ATGCCACTTTAAAACAGATAGCTAGCAAATTAAGAGAACAATTTTGGAAATAATAAAACAATAATCTTTAAGCAA 6730 6740 6750 6760 6770 6780 6790

E G N F S T V I Q H N C L I V L G L I V L G V L K R G I F L L * F N T T V * * Y L V * * Y L E Y * R G E F F Y C N S T Q L F N S T W F N S T W S T E GAGGGGAATTTTTCTACTGTAATTCAACACACTGTTTAATAGTACTTGGTTTAATAGTACTTGGAGTACTGAAG 6850 6860 6870 6880 6890 6910

E * N N L * T C G R K * E K Q C M P L P S A D K L N K T I Y K H V A G S R K S N V C P S H Q R T N * I K Q F I N M W Q E V G K A M Y A P P I S G Q I GAATAAAACAATTTATAAACATGTGGGAGGAAGTAGGAAAAGCAATGTATGCCCCTCCCATCAGCGGACAAATTA 6970 6980 6990 7000 7010 7020 7030

V I T T M G P R S S D L E E E I * G T I G E V N Y * * Q Q W V R D L Q T W R R R Y E G Q L E K * I I N N N N N G S E I F R P G G G D M R D N W R S E L GTAATAACAACAATGGGTCCGAGATCTTCAGACCTGGAGGAGAGATATGAGGGACAATTGGAGAAGTGAATTAT 7090 7100 7110 7120 7130 7140 7150

PROREEWCREKKEQWE*ELCSLGSWQGKEKSGAERKKSSGNRSFVPWVLGKAKAKRRVVQREKRAVGIGALFLGFLCCAAGGCAAAGAGAGAGAGAGAGAAAAAAGAGCAGTGGGAATAGGAGCTTTGTTCCTTGGGTTCTTGG7210 7220 7230 7240 7250 7260 7270

Y R P D N Y C L V * C S S R T I C * G L L R R N S T G Q T I I V W Y S A A A E Q F A E G Y * G A T A Q A R Q L L S G I V Q Q Q N N L L R A I E A Q Q TACAGGCCAGACAATTATTGTCTGGTATAGTGCAGCAGCAGAACAATTTGCTGAGGGCTATTGAGGCGCAACAGC 7330 7340 7350 7360 7370 7380 7390

ESWLWKDT*RINSSWGFGVALENSF



NRTMYKCOHSTMYTWN*NSSINST TGPCTNVSTVQCTHGIRPVVSTQ **AACAGGACCATGTACAAATGTCAGCACAGTACÃATGTACACATGGAATTAGGCCAGTAGTATCAACTCÂAC** THLLQ*EK*EI*DKHIVTLVEQNG SICYNRKNRKYETSTK*H**SKME AFVTIGKIGNMRQAHC<u>NIS</u>RAKW<u>N</u> AGCATTTGTTACAATAGGAAAATAGGAAATATGAGACAAGCACATTGTAACATTAGTAGAGCAAAATGGA . 6670 I I K Q * S L S N P Q E G T Q K L * R T V L I V

* * N N N L * A I L R R G P R N C N A Q F * L W

N K I I I F K Q S S G G D P E I V T H S F N C G

TAATAAAACAATAATCTTTAAGCAATCCTCAGGAGGGGGACCCAGAATTGTAACGCACAGTTTTAATTGTG LIVLGVLKGQITLKEVTQSHSHA V**YLEY*RVK*H*RK*HNHTPMQ PNSTWSTEGSNNTEGSDTITLPC TGCCCCTCCCATCAGCGGACAAATTAGATGTTCATCAAATATTACAGGGCTGCTATTAACAAGAGATGGTG * G T I G E V N Y I N I K * * K L N H * E * H P E G Q L E K * I I * I * S S K N * T I R S S T H R D N W R S E L Y K Y K V V K I E P L G V A P T GAGGGACAATTGGAGAAGTGAATTATATAAATATAAAGTAGTAAAAATTGAACCATTAGGAGTAGCACCCA * E L C S L G S W E Q Q E A L W A H G Q * R * R R S F V P W V L G S S R K H Y G R T V N D A D G G A L F L G F L G A A G S T M G A R S M T L T V AGGAGCTTTGTTCCTTGGGTTCTTGGGAGCAGCAGGAAGCACTATGGGCGCACGGTCAATGACGCTGACGG C * G L L R R N S I C C N S Q S G A S S S S R Q A E G Y * G A T A S V A T H S L G H Q A A P G K L R A I E A Q Q H L L Q L T V W G I K Q L Q A R GCTGAGGGCTATTGAGGCGCÂACÂGCATCTGTTGCÂACTCACAGTCTGGGGCATCAAGCÂGCTCCÂGGCAA G V A L E N S F A P L L C L G M L V G V I N L



N P G C G K I P K G S T A P G D L G L L W K T H I L A V E R Y L K D Q Q L L G I W G C S G K L I GAATCCTGGCTGTGGAAAGATACCTAAAGGATČAAČAGCTCCTGGGGATTTGGGGTTGCTCTGGAAAACTCATI 7490 7500 7480 7470 7460 W N R F G I T * P G W S G T E K L T I T Q A * Y I
G T D L E * H D L D G V G Q R N * Q L H K L N T
E Q I W N N M T W M E W D R E I N N Y T S L I H TGGAACAGATTTGGAATAACATGACCTGGATGGAGTGGGACAGAGAAATTAACAATTACACAAGCTTAATACAT 7620 7590 7600 7610 7580 N Y W N * I N G Q V C S I G L T * Q I G C G I * K I I G L R * M G K F V E L V * H N K L A V V Y K L L E L D K W A S L W N W F N I T N W L W Y I K AATTATTGGAATTAGATAAATGGGCAAGTTTGTGGAATTGGTTTAACATAACAAATTGGCTGTGTATATAAAA 7740 7710 7720 7730 7700 L L Y F L * * I E L G R D I H H Y R F R P T S Q C T F Y S E * S * A G I F T I I V S D P P P N A V L S I V N R V R Q G Y S P L S F Q T H L P T TTGCTGTACTTTCTATAGTGAATAGAGTTAGGCÄGGĞATATTCACCATTATCGTTTCÄGACCCACCTCCCAACC 7860 7850 7820 7830 7840 R E T E T D P F D * * T D P * H L S G T I C G A L E R Q R Q I H S I S E R I L S T Y L G R S A E P R D R D R S I R L V N G S L A L I W D D L R S L AGAGAGACAGAGACCATTCGATTAGTGAACGGATCCTTAGCACTTATCTGGGACGATCTGCGGAGCCTT 7930 7940 7950 7960 7970 7980 7990

TRIVELLGRRGWEALKYWWNLLQYWRGGLWNFWDAGGGGGGGGGGGGGGGGGGGGGGGGGGGGAGCCCTCAAATATTGGTGGAATCTCCTACAGTATTC
8050 8060 8070 8080 8090 8100 8110

A I A V A E G T D R V I E V V Q G A C R A I R H I P * Q * L R G Q I G L * K * Y K E L V E L F A T H S S S * G D R * G Y R S S T R S L * S Y S P H GCCATAGCAGTAGCTGAGGGGACAGATAGGGTTATAGAAGTAGTACAAGGAGCTTGTAGAGCTATTCGCCACAT 8170 8180 8190 8200 8210 8220 8230

G W Q V V K K * C G W M A Y C K G K N E T S * A S G G K W S K S S V V G W P T V R E R M R R A E P V A S G Q K V V W L D G L L * G K E * D E L S Q GGGTGGCAAGTGGTCAAAAAGTAGTGTGGTTGGATGGCCTACTGTAAGGGAAAGAATGAGACGAGCTGAGCCAG 8290 8300 8310 8320 8330 8340 8350

S N H K * Q Y S S Y Q C C L C L A R S T R G G G G A I T S S N T A A T N A A C A W L F A Q E E E E Q S Q V A I Q Q L P M L L V P G * K H K R R R R AGCAATCACAAGTAGCAGCTACCAATGCTGCTTGTGCCTGGCTAGAAGCACAAGAGGAGGAGGAGG 8410 8420 8430 8440 8450 8460 8470

DGSCRS*PLFKRKGGTGRANSLPIK



W K T H L H H C C A L E C * L E * * I S G K L I C T T A V P W N A S W S N K S L CTGGAAAACTCATTTGCACCACTGCTGTGCCTTGGAATGCTAGTTGGAGTAATAAATCTC 7520 7530 7540 7550 Q A * Y I P * L K N R K T S K K R M N K K L N T F L N * R I A K P A R K E * T R S L I H S L I E E S Q N Q Q E K N E Q E CAAGCTTAATACATTCCTTAATTGAAGAATCGCÃAAACCÃGCÃAGAAAAGAATGAACÃAG 7640 7650 7660 G I * K Y S * * * * E A W * V * E * F V V Y K N I H N D S R R L G R F K N S F W Y I K I F I M I V G G L V G L R I V F TGTGGTATATAAAAATATTCATAATGATAGTAGGAGGCTTGGTAGGTTTAAGAATAGTTT 7780 7790 7760 7770 PTSQPRGDPTGPKE*KKKVEPPPPNPEGTRQARRNRRRWRHLPTPRGPDRPEGTEEEGG CCACCTCCCAACCCCGAGGGACCCGACAGGCCCGAAGGAATAGAAGAAGAAGATGGAG 7910 7920 7880 7890 7900 I C G A L C L F S Y H R L R D L L L I V S A E P C A S S A T T A * E T Y S * L * L R S L V P L Q L P P L E R L T L D C N ŦĊŦĠĊĠĠĄĞĊĊŦŦĠĬĠĊĊŢĊŦŦĊĂĠĊŢĄĊĊĸĊĊĠĊŢŢĠĂĠĄĠĄĊŦŢĄĊŢĊŦŦĠĂŦŢĞŢĄ 8000 8010 8020 8030 TCCTACAGTATTGGAGTCAGGAACTAAAGAATAGTGCTGTTAGCTTGCTCÃATGCCACA 8120 8130 8140 A I R H I P R R I R Q G L E R I L L * D L F A T Y L E E * D R A W K G F C Y K M Y S P H T * K N K T G L G K D F A I R W CTATTCGCCACATACCTAGAAGAATAAGACAGGGCTTGGAAAGGATTTTGCTATAAGAT 8230 8240 8250 8260 T S * A S S R W G G S S I S R P G K T W R A E P A A D G V G A A S R D L E K H G E L S Q Q Q M G W E Q H L E T W K N M E CGAGCTGAGCAGCAGCAGCAGCAGCAGCATCTGAGACAAAACATGG 8380 8370 8360 Q G G G G F S S H T S G T F K T N D L E E E E V G F P V T P Q V P L R P M T Y R R R R R W V F Q S H L R Y L * D Q * L T GAGGAGGAGGAGGTTTCCAGTCACACCTCAGGTACCTTTAAGACCAATGACTTA 8470 8480 8490 8500

L P T K T R Y P * S V D L P H T R L L



. 10	20	30	40	50	60
. እ.አ. / / / / / / / / / / / / / / / / / /	TGAGTGCTTC		TGCCCGTCTG	TTGTGTGACT	CTGGTAACTA
70	80	90	100	110	120
GAGATCCCTC	AGACCCTTTT	AGTCAGTGTG	GAAAATCTCT	AGCAGTGGCG	CCCGAACAGG
130	140	150	160	170	180
GACTTGAAAG	CGAAAGGGAA		CTCTCTCGAC	GCAGGACTCG	GCTTGCTGAA
190	200	210	220	230	240
GCGCGCACGG	CAAGAGGCGA	GGGGAGGCGA	CTGGTGAGTA	CGCCAAAAAT	TTTGACTAGC
250	260	270	280	290	300
	AGGAGAGAGA	TGGGTGCGAG	AGCGTCAGTA	TTAAGCGGGG	GAGAATTAGA
310	320	330	340	350	360
TCGATCGGAA	AAAATTCGGT	TAAGGCCAGG	GGCAAAGAAA	AAATATAAAT	TAAAACATAT
370	380	390	400	410	420
AGTATGGGCA	AGCAGGGAGC	TAGAACGATT	CGCTGTTAAT	CCTGGCCTGT	TAGAAACATC
430	440	450	460	470	480
AGAAGGCTGT	AGACAAATAC	TGGGACAGCT		CTTCAGACAG	GATCAGAAGA
490	500	510	520	530	540
ACTTAGATCA	TTATATAATA	CAGTAGCAAC	CCTCTATTGT	GTGCATCAAA	
550	560	570	580	590	600
AAAAGACACC	AAGGAAGCTT		AGAGGAAGAG	CAAAACAAAA	
610	620	630	640	650	660
AGCACAGCAA	GCAGCAGCTG			Q	ATTACCCTAT
670	680	690	700	710	720
		AAATGGTACA		TCACCTAGAA	
730	740	750	760	770	780
ATGGGTAAAA		AGAAGGCTTT	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	GTGATACCCA	TGTTTCAGC 840
790	800	810	820	830	010
ATTATCAGAA		CACAAGATTT		G	TGGGGGGACA
850	860	870	880	890	AATGGGATAG
TCAAGCAGCC	ATGCAAATGT			GAAGCTGCAG 950	960
910	920	930	940	• • •	•
				ATGAGAGAAC 1010	1020
970	980	990	1000		
			GGAACAAATA	GGATGGATGA 1070	1080
1030	1040	1050	1060		
		TTTATAAAAG 1110	ATGGATAATC	CTGGGATTAA 1130	1140
1090	1100	1110	1120	1130	7740

FIG. 19



AAGAATGTAT	AGCCCTACCA	GCATTCTGGA	CATAAGACAA	GGACCAAAAG	AACCCTTTAG
1150	1160	1170	1180	1190	1200
	GACCGGTTCT	ATAAAACTCT	AAGAGCCGAG	CAAGCTTCAC	AGGAGGTAAA
1210	1220	1230	1240	1250	1260
AAATTGGATG	ACAGAAACCT	TGTTGGTCCA	AAATGCGAAC	CCAGATTGTA	AGACTATTTT
1270		1290	1300	1310	1320
AAAAGCATTG	GGACCAGCAG	CTACACTAGA	AGAAATGATG	ACAGCATGTC	AGGGAGTGGG
1330	1340	1350	1360	1370	1380
AGGACCCGGC	CATAAGGCAA	GAGTTTTGGC	TGAAGCAATG	AGCCAAGTAA	
1390	1400	1410	1420	1430	1440
TACCATAATG	ATGCAAAGAG	GCAATTTTAG	GAACCAAAGA	AAGATTGTTA	AGTGTTTCAA
1450	1460	1470	1480	1490	1500
TTGTGGCAAA	GAAGGCCACA	TAGCCAGAAA	TTGCAGGGCC	CCTAGGAAAA	AGGGCTGTTG
1510	1520	1530	1540	1550	1560
GAAATGTGGA	AAGGAAGGAC	ACCAAATGAA	AGATTGTACT	GAGAGACAGG	CTAATTTTTT
1570	1580	1590	1600	1610	1620
AGGGAAGATC	TGGCCTTCCT	ACAAGGGAAG	GCCAGGGAAT	TTTCTTCAGA	
1630	1640	1650	1660	1670	1680
GCCAACAGCC	CCACCAGAAG	AGAGCTTCAG	GTCTGGGGTA	GAGACAACAA	
1690	1700	1710	1720	1730	1740
GAAGCAGGAG	CCGATAGACA	AGGAACTGTA	TCCTTTAACT	TCCCTCAGAT	
1750	1760	1770	1780	1790	1800
CAACGACCCC	TCGTCACAAT	AAAGATAGGG			ATTAGATACA
1810	1820	1830	1840	1850	1860
GGAGCAGATG				GAAGATGGAA	
1870	1880	1890	1900	1910	1920
ATAGGGGGAA	TTGGAGGTTT	TATCAAAGTA		ATCAGATACT	
1930	1940	1950	1960	1970	1980
TGTGGACATA	AAGCTATAGG	TACAGTATTA		CACCTGTCAA	
1990	2000	2010	2020	2030	2040
AGAAATCTGT		TGGTTGCACT		CCATTAGTCC	TATTGAAACT
2050	2060		2080	2090	2100
	AATTAAAGCC				
2110	2120	2130	2140	2150	2160
GAAGAAAAA				TGGAAAAGGA	
2170	2180	2190	2200	2210	2220
	GGCCTGAAAA				
2230	2240	2250	2260	2270	2280
	GGAGAAAATT				
2290	2300	2310	2320	2330	2340
	AATTAGGAAT				
2350	2360	2370	2380	2390	2400



GTACTGGATG	TGGGTGATGC	ATATTTTTCA	GTTCCCTTAG	ATGAAGACTT	CAGGAAGTAT
2410	2420	2430	2440	2450	2460
ACTGCATTTA	CCATACCTAG	TATAAACAAT	GAGACACCAG	GGATTAGATA	TCAGTACAAT
2470	2480	2490	2500	2510	2520
GTGCTTCCAC	AGGGATGGAA	AGGATCACCA	GCAATATTCC	AAAGTAGCAT	GACAAAAATC
2530	2540	2550	2560	2570	2580
ТТАСАСССТТ	TTAGAAAACA	AAATCCAGAC	ATAGTTATCT	ATCAATACAT	GGATGATTTG
2590	2600	2610	2620	2630	2640
TATGTAGGAT	CTGACTTAGA	AATAGGGCAG	CATAGAACAA	AAATAGAGGA	GCTGAGACAA
2650	2660	2670	2680	2690	2700
CATCTGTTGA	GGTGGGGACT	TACCACACCA	GACAAAAAAC	ATCAGAAAGA	ACCTCCATTC
2710	2720	2730	2740	2750	2760
CTTTGGATGG	GTTATGAACT	CCATCCTGAT	AAATGGACAG	TACAGCCTAT	AGTGCTGCCA
2770	2780	2790	2800	2810	2820
		CAATGACATA	CAGAAGTTAG	TGGGAAAATT	GAATTGGGCA
2830	2840	2850	2860	2870	2880
AGTCAGATTT	ACCCAGGGAT	TAAAGTAAGG	CAATTATGTA	AACTCCTTAG	AGGAACCAAA
2890	2900	2910	2920	2930	2940
GCACTAACAG	AAGTAATACC	ACTAACAGAA	GAAGCAGAGC	TAGAACTGGC	AGAAAACAGA
2950	2960	2970	2980	2990	3000
GAGATTCTAA	AAGAACCAGT	ACATGGAGTG	TATTATGACC	CATCAAAAGA	CTTAATAGCA
3010	3020	3030	3040	3050	3060
GAAATACAGA	AGCAGGGGCA	AGGCCAATGG	ACATATCAAA	TTTATCAAGA	GCCATTTAAA
3070	3080	3090	3100	3110	3120
AATCTGAAAA	CAGGAAAATA	TGCAAGAACG	AGGGGTGCCC	ACACTAATGA	TGTAAAACAA
3130	3140	3150	3160	3170	3180
TTAACAGAGG	CAGTGCAAAA	AATAACCACA	GAAAGCATAG	TAATATGGGG	AAAGACTCCT
3190	3200	3210	3220	3230	3240
AAATTTAAAC	TACCCATACA	AAAGGAAACA	TGGGAAACAT	GGTGGACAGA	GTATTGGCAA
3250	3260	3270	3280	3290	3300
GCCACCTGGA	TTCCTGAGTG			CTTTAGTGAA	ATTATGGTAC
3310	3320	3330	3340	3350	3360
CAGTTAGAGA				ATGTAGATGG	GGCAGCTAGC
3370	3380			3410	3420
AGGGAGACTA					AAAAGTTGTC
3430	3440	3450	3460	3470	3480
ACCCTAACTG					AGCTTTGCAG
3490	3500	3510	3520	3530	3540
					AATCATTCAA
3550	3560	3570	3580	3590	3600
					GTTAATAAAA
3610	3620	3630	3640	3650	3 6 60



**************	ጥርጥልጥርጥርርር	ATGGGTACCA	GCACACAAAG	GAATTGGAGG	AAATGAACAA
3670	3 68 0	3690	3700	3/10	3720
ባለ ነ ነ ነ ነ ነ ነ ነ ነ ነ ነ ነ ነ ነ ነ ነ ነ ነ ነ ነ	ጥልርጥሮልርጥርር	TGGAATCAGG	AAAGTACTAT	TTTTAGATGG	AATAGATAAG
3730	3740	3750	3760	3770	3/60
GCCCAAGATG	AACATGAGAA	ATATCACAGT	AATTGGAGAG	CAATGGCTAG	TGATTTTAAC
3790	3800	3810	3820	3830	3840
CTCCCACCTC	ТАСТАССААА	AGAAATAGTA	GCCAGCTGTG	ATAAATGTCA	GCTAAAAGGA
3850	3860	3870	3880	3890	3900
CAACCCATCC	атссасааст Темарат	AGACTGTAGT	CCAGGAATAT	GGCAACTAGA	TTGTACACAT
3910	3920	3930	3940	3950	3960
TTAGAAGGAA	AAGTTATCCT	GGTAGCAGTT	CATGTAGCCA	GTGGATATAT	AGAAGCAGAA
3970	3980	3990	4000	4010	4020
GTTATTCCAG	CAGAAACAGG	GCAGGAAACA	GCATACTTTC	TTTAAAATT	AGCAGGAAGA
4030	4040	4050	4060	4070	4080
	AAACAATACA	TACAGACAAT	GGCAGCAATT	TCACCAGTAC	TACGGTTAAG
4090	4100	4110	4120	4130	4140
GCCGCCTGTT	GGTGGGCGGG	AATCAAGCAG	GAATTTGGAA	TTCCCTACAA	TCCCCAAAGT
4150	4160	4170	4180	4190	4200
CAAGGAGTAG	TAGAATCTAT	GAATAAAGAA	TTAAAGAAAA	TTATAGGCCA	GGTAAGAGAT
4210	4220	4230	4240	4250	4260
CAGGCTGAAC	ATCTTAAGAC	AGCAGTACAA	ATGGCAGTAT	TCATCCACAA	TTTTAAAAGA
4270	4280	4290	4300	4310	4320
AAAGGGGGGA	TTGGGGGGTA	CAGTGCAGGG	GAAAGAATAG	TAGACATAAT	AGCAACAGAC
4330	4340	4350	4360	4370	4380
ATACAAACTA	AAGAATTACA	AAAACAAATT	ACAAAAATTC	AAAATTTTCG	GGTTTATTAC
4390	4400	4410	4420	4430	4440
AGGGACAGCA		TTGGAAAGGA		TCCTCTGGAA	AGGTGAAGGG
4450	4460	4470	4480	4490	4500
GCAGTAGTAA	TACAAGATAA	TAGTGACATA		CAAGAAGAAA	AGCAAAGATC
4510	4520	4530	4540	4550	4560
ATTAGGGATT		GATGGCAGGT		TGGCAAGTAG	ACAGGATGAG
4570	4 580	4590	4600	4610	4620
GATTAGAACA	TGGAAAAGTT	TAGTAAAACA		GTTTCAGGGA	AAGCTAGGGG
4630	4640	4650		4670	4680
		ATGAAAGCCC			AAGTACACAT
4690	4700	4710	4720	4730	4740
CCCACTAGGG		TGGTAATAAC			CAGGAGAAAG
4750	4760	4770	4780	4790	4800
		GAGTCTCCAT			
4810	4820	4830	4840	4850	4860
					GTTTTTCAGA
4870	4880	4890	4900	4910	4920



СТСТССТАТА	AGAAAGGCCT	TATTAGGACA	TATAGTTAGC	CCTAGGTGTG	AATATCAAGC
4930	4940	4950	4960	2970	2980
AGGACATAAC	AAGGTAGGAT	СТСТАСААТА	CTTGGCACTA	GCAGCATTAA	TAACACCAAA
4990	5000	5010	5020	5030	5040
	CCACCTTTGC	CTAGTGTTAC	GAAACTGACA	GAGGATAGAT	GGAACAAGCC
5050	5060	5070	5080	5090	5100
CCAGAAGACC	AAGGGCCACA	GAGGGAGCCA	CACAATGAAT	GGACACTAGA	GCTTTTAGAG
5110	5120	5130	5140	5150	5160
GAGCTTAAGA	ATGAAGCTGT	TAGACATTTT	CCTAGGATTT	GGCTCCATGG	CTTAGGGCAA
5170	5180	5190	5200	5210	5220
CATATCTATG	AAACTTATGG	GGATACTTGG	GCAGGAGTGG	AAGCCATAAT	AAGAATTCTG
5230	5240	5250	5260	5270	5280
CAACAACTGC	TGTTTATCCA	TTTCAGAATT	GGGTGTCGAC	ATAGCAGAAT	AGGCGTTACT
5290	5300	5310	5320	5330	5340
CAACAGAGGA	GAGCAAGAAA	TGGAGCCAGT		CTAGAGCCCT	GGAAGCATCC
5350	5360	5370	5380	5390	5400
AGGAAGTCAG	CCTAAAACTG	CTTGTACCAC	TTGCTATTGT	AAAAAGTGTT	GCTTTCATTG
. 5410	5420	5430	5440	5450	5460
CCAAGTTTGT	TTCACAACAA	AAGCCTTAGG		GGCAGGAAGA	AGCGGAGACA
5470	5480	5490	5500	5510	5520
GCGACGAAGA	CCTCCTCAAG	GCAGTCAGAC		TCTCTATCAA	
5530	5540	5550	5560	5570	5580
AGTACATGTA				TTAGTAGTAG	
5590	5600	5610	5620	5630	5640
				AAAATATTAA	
5650	5660	5670	5680	5690	5700
AATAGACAGG				GACAGTGGCA	
5710	5720	5730	5740	5750	5760
AGGAGAAATA		TGGAGATGGG			CTCCTTGGGA
5770	5780	5790	5800	5810	5820
TATTGATGAT		ACAGAAAAAT		AGTCTATTAT	
5830	5840	5850	5860	5870	5880
				TGCTAAAGCA	
5890	5900	5910	5920	5930	5940
				AGACCCCAAC	
5950	5960	5970	5980	5990	6000
				AAATGACATG	
6010	6020	6030	6040	6050	6060
				GCCATGTGTA	
6070	6080	6090	6100	6110	6120
				TACTAATACC	
6130	6140	6150	6160	6170	6180



ATACCAATAG	TAGTAGCGGG	GAAATGATGA	TGGAGAAAGG	AGAGATAAAA	AACTGCTCTT
6190	6200	6210	6220	6230	6240
TCAATATCAG	CACAAGCATA	AGAGGTAAGG	TGCAGAAAGA	ATATGCATTT	
6250	6260	6270	6280	6290	6300
TTGATATAAT	ACCAATAGAT	AATGATACTA	CCAGCTATAC	GTTGACAAGT	
6310	6320	6330	6340	6350	636 0
CAGTCATTAC	ACAGGCCTGT	CCAAAGGTAT	CCTTTGAGCC	AATTCCCATA	CATTATTGTG
6370	6380	6390	6400	6410	6420
CCCCGGCTGG	TTTTGCGATT	CTAAAATGTA	ATAATAAGAC	GTTCAATGGA	
6430	6440	6450	6460	6470	6480
GTACAAATGT	CAGCACAGTA	CAATGTACAC	ATGGAATTAG		
6490	6500	6510	6520	6530	6540
TGCTGTTGAA	TGGCAGTCTA	GCAGAAGAAG	AGGTAGTAAT	TAGATCTGCC	AATTTCACAG
6550	6560	6570	6580	6590	6600
ACAATGCTAA	AACCATAATA	GTACAGCTGA	ACCAATCTGT	AGAAATTAAT	
6610	6620	6630	6640	6650	6660
CCAACAACAA	TACAAGAAAA	AGTATCCGTA	TCCAGAGGGG	ACCAGGGAGA	
6670	6680	6690	6700	6710	6720
	AATAGGAAAT				
6730	6740	6750	6760	6770	6780
ATGCCACTTT		GCTAGCAAAT			AATAAAACAA
6790	6800	6810	6820	6830	6840
TAATCTTTAA	GCAATCCTCA	GGAGGGGACC		AACGCACAGT	TTTAATTGTG
.6850	6860	6870	6880	6890	6900
GAGGGGAATT		AATTCAACAC			-
6910	6920	6930	6940	6950	6960
CTTGGAGTAC		AATAACACTG			
6970	6980	6990	7000	7010	7020
	ATTTATAAAC				GCCCCTCCCA
7030	7040	7050	7060	7070	7080
	AATTAGATGT				
7090	7100	7110	7120	7130	7140
	CAATGGGTCC				
7150	7160	7170	7180	7190	7200
	ATTATATAAA				
7210	7220	7230	7240	7250	7260
	GAGAAGAGTG				
7270	7280	7290	7300	7310	7320
	CTTGGGAGCA				
7390	7340	7350	7360	7370	7380
	ACAATTATTG				
7390	7400	7410	7420	7430	7440



TTGAGGCGCA	ACAGCATCTG	TTGCAACTCA	CAGTCTGGGG	CATCAAGCAG	CTCCAGGCAA
7450	7460	7470	7480	7490	7500
GAATCCTGGC	TGTGGAAAGA	TACCTAAAGG	ATCAACAGCT	CCTGGGGATT	TGGGGTTGCT
7510	7520	7530	7540	7550	7560
CTGGAAAACT	CATTTGCACC	ACTGCTGTGC	CTTGGAATGC	TAGTTGGAGT	AATAAATCTC
7570	7580	7590	7600	7610	7620
TGGAACAGAT	TTGGAATAAC	ATGACCTGGA	TGGAGTGGGA	CAGAGAAATT	AACAATTACA
7630	7640	7650	7660	7670	7680
CAAGCTTAAT	ACATTCCTTA	ATTGAAGAAT	CGCAAAACCA	GCAAGAAAAG	AATGAACAAG
7690	7700	7710	7720	7730	7740
AATTATTGGA	ATTAGATAAA	TGGGCAAGTT	TGTGGAATTG	GTTTAACATA	ACAAATTGGC
7750	7760	7770	7780	7790	7800
TGTGGTATAT	AAAAATATTC	ATAATGATAG	TAGGAGGCTT	GCTAGGTTTA	AGAATAGTTT
7810	7800	7810	7820	7830	7840
TTGCTGTACT	TTCTATAGTG	AATAGAGTTA	GGCAGGGATA	TTCACCATTA	TCGTTTCAGA
7870	7880	7890	7900	7910	7920
CCCACCTCCC	AACCCCGAGG	GGACCCGACA	GGCCCGAAGG	AATAGAAGAA	GAAGGTGGAG
7930	7940	7950	7960	7970	7980
AGAGAGACAG	AGACAGATCC	ATTCGATTAG	TGAACGGATC	CTTAGCACTT	
7990	8000	8010	8020	8030	8040
ATCTGCGGAG	CCTTGTGCCT	CTTCAGCTAC		GAGACTTACT	CTTGATTGTA
8050	8060	8070	8080	8090	8100
ACGAGGATTG	TGGAACTTCT		GGGTGGGAAG	CCCTCAAATA	TTGGTGGAAT
8110	8120	8130	8140	8150	8160
CTCCTACAGT	ATTGGAGTCA	GGAACTAAAG	AATAGTGCTG	TTAGCTTGCT	
8170	8180	8190	8200	8210	8220
GCCATAGCAG				TAGTACAAGG	AGCTTGTAGA
8230	8240	8250	8260	8270	8280
				AAAGGATTTT	
8290	8300	8310	8320	8330	8340
				ACTGTAAGGG	
8350	8360	8370	8380	8390	8400
				CGAGACCTGG	AAAAACATGG
8410	8420	8430	8440	8450	8460
				TGTGCCTGGC	
8470	8480	8490	8500	8510	8520
				CCTTTAAGAC	
8530	8540	8550	8560	8570	8580
				GGGGGACTGG	
8590	8600	8610	8620	8630	8640
				TACCACACAC	
8650	8660	8670	8680	8690	8700



CCCTGATTGG	CAGAACTACA	CACCAGGGCC	AGGGGTCAGA	TATCCACTGA	CCTTTGGATG
8710	8720	8730	8740	8750	8760
GTGCTACAAG	CTAGTACCAG	TTGAGCCAGA	TAAGGTAGAA	GAGGCCAATA	AAGGAGAGAA
8770	8780	8790	8800	8810	8820
CACCAGCTTG	TTACACCCTG	TGAGCCTGCA	TGGAATGGAT	GACCCTGAGA	GAGAAGTGTT
8830	8840	8850	8860	8870	8880
AGAGTGGAGG	TTTGACAGCC	GCCTAGCATT	TCATCACGTG	GCCCGAGAGC	
8890	8900	8910	8920	8930	8940
GTACTTCAAG	AACTGCTGAC	ATCGAGCTTG	CTACAAGGGA	CTTTCCGCTG	GGGACTTTCC
8950	8960	8970	8980	8990	9000
.AGGGAGGCGT	GGCCTGGGCG	GAACTGGGGA	GTGGCGAGCC	CTCAGATGCT	GCATATAAGC
9010	9020	9030	9040	9050	9060
AGCTGCTTTT	TGCCTGTACT	GGGTCTCTCT	GGTTAGACCA	GATTTGAGCC	TGGGAGCTCT
9070	9080	9090	9100	9110	9120
CTGGCTAACT	AGGGAACCCA	CTGCTTAAGC	CTCAATAAAG	CTT	

FIG. 26